In Vehicle Payments Birds of a Feather

- General
- Charter
- Wallet Project Charter
- Agenda & Meeting Notes
 - o 21st of March 2024
 - o 15th of February 2024
 - o 18th of January 2024
 - o 14th of December 2023
 - o 16th of November 2023

Previous Work Done by the IVP SIG

General

Welcome to the COVESA In Vehicle Payments Birds of a Feather!

Monthly Meeting: Third Thursday of every Month, 9-10am PT, 12-1pm ET, 6-7pm CET (Zoom Link) (Subscribe to Community Calendar to stay up to date)

Slack: Join COVESA Community Slack Workspace (https://covesacommunity.slack.com) - Channel: in-vehicle-payments

Charter

Doc

Wallet Project Charter

Doc

Antitrust

Before we begin, we would like to make clear that COVESA is committed to compliance with the antitrust laws in all of its activities, and that it expects all participants to similarly comply with the antitrust laws. We will not engage in--and members must refrain from--any discussion of, or understandings regarding competitively sensitive topics. If you have any doubts regarding whether a matter is appropriate for discussion, please consult with your antitrust counsel.

Open and Royalty-Free

Further, COVESA aspires to be an open and royalty-free organization. The discussions and contributions made during this session are governed by the CO VESA Intellectual Property policy. If you are unfamiliar with that policy, please review it in detail prior to making any contribution that reads upon a patent.

Agenda & Meeting Notes

21st of March 2024

- Welcome and introductions
 - List of participants
 - Jens Kohnen (Starfish)
 - Vamsi Putrevu (Mavi.io)
 - Paul Boyes (COVESA)
 - Maria Trudgeon (GM)
 - Richard Fernandes (GM)
 - Nick Telford-Reed (Endava)Jose Freitas (Faurecia Aptoide)
 - Rachel Dismuke (Abalta)
 - Racnel Dismuke (Abalta)Jim Greene (Next Wave Advisors)
 - Dan Dinges (NN)
 - Robert Bronninger (BMW)
 - Brief introduction of members, their role, and organization they represent.
- All Member Meeting in April
 - Discussion of topics for the thought leadership session on April 18th 2pm
 - Payment Authentication in car
 - Document and understand regulations from different regions
 - In-Vehicle commerce Payment via phone vs car

- Payment credentials on device vs on cloud
- Alternative Payment Methods / Non card payments
- Business models of In-Car Payments Payments
- o Current panelist are joining from
 - Starfish
 - Mavi.io
 - Endava
 - Aptiv
 - Further panelists and thought leaders are highly welcome please reach out to Jens Kohnen (jens@starfish.team)
- The working session of the IVP group will be held on April 18th 3:15pm
- Next steps
 - o During the AMM the problem statements for the working group will be aligned and started to be worked on
- Next events
 - COVESA All Member Meeting April 16-18, 2024 Gothenburg, Sweden
 - Next IVP Call 16.05.2024

15th of February 2024

- · Welcome and Introductions
 - · List of participants
 - Jens Kohnen (Starfish)
 - Vamsi Putrevu (Mavi.io)
 - Paul Boyes (COVESA)
 - Mike Nunnery (COVESA)
 - Maria Trudgeon (GM)
 - Richard Fernandes (GM)
 - Sri Palacharla (GM)
 - Nick Telford-Reed (Endava)
 - Paula Silverthorn (Endava)
 - Jose Freitas (Faurecia Aptoide)
 - Rachel Dismuke (Abalta)
 - Slavyan Nakev (QaiWare)
 - o Brief introduction of each member, their role, and organization they represent.
 - Objectives and expectations towards the IVP group
- · Recap and discussion on problem statements to be tackled within this group
 - Proposal 1: Standard for OEM and Third-Party Integration (as combination of the first 2 we discussed last time):
 - Problem Statement

Automotive Original Equipment Manufacturers (OEMs) encounter significant challenges in incorporating third-party service providers into their in-car entertainment ecosystems, compounded by the lack of a standardized approach for the integration of payment, billing, invoicing, and master data exchange processes. This complexity is further exacerbated when attempting to create a uniform API interface that allows third-party applications to conduct transactions for various use cases such as parking, charging, and purchasing food directly from the vehicle's interface. The absence of an industry-wide standard leads to each OEM and third-party provider independently tackling these issues, resulting in inefficiencies and a disjointed user experience.

Solution Proposal:

The proposed initiative aims to tackle the dual challenges faced by OEMs and third-party service providers by establishing a common industry standard that not only streamlines the integration of services into in-car entertainment systems but also defines a standard API interface for third-party apps. This standard will facilitate seamless payment, billing, invoicing, and master data exchange, alongside ensuring technical integration is both efficient and scalable. By doing so, it will enable a consistent and user-friendly interface for in-car transactions across various services and applications, enhancing the overall digital experience within vehicles.

Potential Action Items:

Convene a working group consisting of representatives from automotive OEMs, third-party service providers, app developers, and tier 1 suppliers to collaboratively define the scope and specifications of the proposed industry standard. Develop a comprehensive framework for the standardization of payment, billing, invoicing, and master data exchange processes, including technical integration guidelines.

Define a uniform API interface that can be implemented by OEMs and/or app stores, ensuring compatibility and ease of integration for third-party applications.

- Proposal 2: In-Car Wallet Interface for Apps:
 - Problem statement:

OEMs face a challenge in standardizing an API interface that 3rd party apps can access to conduct payments usecases such as parking, charging, buying food etc.

Solution Proposal:

Define a standard interface (APIs) that will be implemented by the OEM and/or app stores and tier 1s

- Proposal 3: Relevant payment methods
 - Problem statement:

Validate if other payment methods than credit cars play a relevant role to be implemented as method for in-car payment

- Proposal 4: OTA
 - Problem statement:

OEM face the issue that updates / replacements of rolled-out applications in vehicles is a problem. Typically not all relevant vehicles are updated and OTA.

- Solution proposal: Define a consensus on huch much payment credential is stored in the vehicle vs. the cloud with all the implication to security, authentication, etc. .
- Next steps
 - Group members to reflect on the problem statement the IVP group is aiming to work on
 - During next IVP call, the topic shall be defined and the agenda for the group workshop during the AMM working session shall be defined
- Next events
 - COVESA All Member Meeting April 16-18, 2024 Gothenburg, Sweden
 - Next IVP Call
 - 21.03.2024

18th of January 2024

- Permission to record the call was given.
- · Welcome and Introductions
 - List of participants
 - Jens Kohnen (Starfish)
 - Vamsi Putrevu (Mavi.io)
 - Paul Boyes (COVESA)
 - Mike Nunnery (COVESA)
 - Maria Trudgeon (GM)
 - Richard Fernandes (GM)
 - Robert Bronninger (BMW)
 - Michael Gross (Endava)
 - Henry Bauer (Endava)
 - Paula Silverthorn (Endava)
 - Emilian Stoilkov (QaiWare)
 - Georgi Radev (QaiWare)
 - O Brief introduction of each member, their role, and organization they represent.
 - Objectives and expectations towards the IVP group
- Proposed problem statements to be tackled within this group:
 - O Proposal 1:
 - Problem Statement: OEMs face a challenge in integrating third-party service providers into their in-car entertainment systems, necessitating a complex process that involves payment, billing, invoicing, and master data exchange, along with technical integration between the entities. This issue is compounded by the lack of a standardized approach, resulting in each automotive OEM and third-party provider independently grappling with the same problem.
 - Solution proposal: To address the prevalent challenge faced by OEMs and third-party service providers in integrating services into in-car entertainment systems. This project aims to establish a common industry standard to streamline payment, billing, invoicing, master data exchange, and technical integration processes.
 - Action items:
 - o Proposal 2:
 - In-Car Wallet Interface for Apps:
 - Problem:
 - OEMs face a challenge in standardizing an API interface that 3rd party apps can access to conduct payments usecases such as parking, charging, buying food etc.
 - Solution Proposal
 - Define a standard interface (APIs) that will be implemented by the OEM and/or app stores and tier 1s $^{\circ}$
 - o Proposal 3:
 - Validate if other payment methods than credit cars play a relevant role to be implemented as method for in-car payment
 - o Proposal 4:
 - Problem statement: OEM face the issue that updates / replacements of rolled-out applications in vehicles is a problem. Typically not all relevant vehicles are updated and OTA.
 - Solution proposal: Limit the app exposure in the vehicle and hold as much of logic and code as possible in the backend. As proposal for this group it should be discussed and an overall architecture approach which caters for this problem and defines how 3rd party app provide their solution. Frontend vs. Backend Integration.
 - Next events
 - COVESA All Member Meeting
 - April 16-18, 2024
 - Gothenburg, Sweden
 - Call to action: Participants and potential working group
 - IVP Group call: February 15, 2024
 - $^{\circ}$ Action item: The participants agreed on further elaborate on the problem statements in the next IVP call.

14th of December 2023

- · Who will be at CES? And, what are you doing?
 - o mavi.io will be there all week
 - Starfish will be there
- Should we meet at CES?
 - o Have presence at booth at CES with QR code to register contact info for updates
- Problem Statement

16th of Novemeber 2023

- Jens Kohnen and @Vamsi Putrevu will serve as chairs. It was agreed there is a need for OEM chair(s) in addition.
 It was agreed the next meeting will be on 14th of Dec. See Community Calendar for details.
 Charter was reviewed.
 It was agreed there is a need for clear problem statement(s) that this group intends to work on.
 Action Item: Participants will bring clear problem statements to the next meeting.
 The following areas of categorization were discussed:

 Feature on demand
 Parking fuel charging a scale from vehicle platform

- Peature on definand
 parking, fuel, charging scale from vehicle platform
 vehicle as a platform direct service provider
 It was suggested that the relationships between VSS and AOSP groups should be explored.